

Amendment to the Drawing

Replacement sheet, Fig 10 is enclosed herein at the request of the Examiner. Fig 10 is generally a redundant representation of Fig 9. Support for Fig 10 are contained in original filed specification, figures 2 – 9, claims and referenced parent application.

No new matter is added.

REMARKS

As stated on page 3 of the Office Action, the Examiner has rejected claims 12 - 20 under 35 USC 112, second paragraph for failing to comply with the written description requirement. The Examiner states that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors(s) , at the time the application was filed, had possession of the claimed invention. Claim 12 has been amended to avoid this rejection. New figure 10 in the amended drawing further supports claims 12 - 20.

As stated on page 3 and 4 of the Office Action, the Examiner has rejected claims 1,3-9, 12, 14-21 and 23-28 under 35 USC 103(a) as being unpatentable over Bates at al, US Patent 7,080,360, in view of Pardo et al, U.S. Patent 5,754,839.

As stated on page 10 of the Office Action, claims 10-11 are rejected under 35 USC 103(a) as being unpatentable over Bates at al, US Patent 7,080,360 in view of Pardo et al, U.S. Patent 5,754,839, further in view of Master et al, U.S.patent 6,836,839.

Bates describes a method, apparatus and article of manufacture for debugging code (Abstract). Bates is not oriented towards stream computers, nor does it envision multiple data and other flows within a stream computer, and their interaction to arrive at a viewpoint descriptive of the data based on a debug stream. Bates does not disclose operation within a stream computer. Bates uses conventional Von Newman computer architecture of the prior art, described in Fig 1 (prior art) of the present application. Bates does not teach multiple functional units operating concurrently in response to tokens as in a stream computer, nor would the teachings in Bates be applicable in a multiple stream environment where a data stream and a debug stream are present.

Bates does not envision multiple data and other flows within a computer having multiple functional units responsive to tokens, and their interaction to arrive at a viewpoint descriptive of the data based on a debug stream. The teachings in Bates

are not applicable in a multiple functional units environment where a data stream containing tokens and a debug stream are present.

Further distinguishing from Bates, the present claims have been amended to included the effect of tokens on the data contained in the data stream. The tokens identify how the functional units are to operate on the data stream. Bates does not have tokens in its data stream, nor can change how the data is to be operated on in accordance with these tokens.

Similarly, Pardo et al, U.S. Patent 5,754,839, filed august 28, 1995, describes a single, pipelined processor (110), not a plurality of interacting processors. Pardo is structurally different from the present application, and does not refer to tokens, or tokens part of a data stream. Pardo does not teach nor suggest using the single computer structure in Bates to arrive at a concurrent, multi-processor structure of the present application where tokens are used to change how the data is to be operated on in accordance with said tokens.

As amended, the claims of the present application do not read on either Bates or Pardo, or the combination of Bates and Pardo, because the present application describes multiple, concurrently operating functional units responsive to tokens contained within the data stream.

Master at al, U.S. Patent 6,836,839, filed March 22, 2001, does not envision a plurality of functional units, operating concurrently, using a data and tokens as in the amended claims. Master describes “ a new category of integrated circuitry and a new methodology for adaptive or reconfigurable computing” (Abstract). The concept of viewpoints generated by a debug stream in conjunction with tokens are not detailed nor suggested.

Thus, the claims as amended, detail the use of tokens in concurrently operating functional units not present in either Bates, Pardo or Master. The claims are therefore not obvious under 35 USC §103(a) over Bates at al, U.S. Patent 7,080,360 in view of Pardo et al, U.S. Patent 5,754,839, further in view of Master et al, U.S. Patent

6,836,839.

Support for the reference to tokens and their operation in the amended claims is found in the originally filed specification, under Detailed Description, pages 4, 5, as well as originally filed claims, drawings and the parent application.

Obviousness under 35 USC 103(a)

The applicable test for obviousness as required by 35 USC 103 (a) is summarized by the “suggestion- teaching - motivation” test. Under this test, a claimed invention cannot be held “obvious” under 35 USC 103 in the absence of some proven “suggestion, teaching or motivation” that would have led a person of ordinary skill in the art to combine prior art teachings in the manner claimed. Setting a threshold for 103 obviousness, and applicable herein, is the holding in *Sakraida v Ag Pro, Inc* 425 US 274, 281-282 (1976) where obviousness was found in a “combination which unites old elements with no change in their respective functions”.

The functions of elements in the present invention, as claimed, differ substantially from the cited prior art. Neither Bates, Pardo or Master suggest using tokens within a data stream, nor can change how the data is to be operated on in accordance with these tokens by functional units operating concurrently.

In contrast to the cited prior art, the present disclosure has a different structure, different elements performing different functions from Bates, Pardo or Master. Thus the present disclosure is not obvious over Bates or a combination of Bates, Pardo and Master.

As stated on page 11-12 of the Office Action, in response to applicant’s previously filed response of April 10, 2007, the arguments presented were inadequate because they referred to “functional units and not multiple nodes”. Applicant’s response no longer refers to “multiple nodes”.

In view of the above, the claims have been amended in accordance with Exam-

iner's suggestions to reflect the structural differences in the present application over Bates, Pardo and Master thus overcoming the 35 USC 103(a) rejection.

No new matter is introduced by the above.

Having overcome rejections and objections by the Examiner, processing towards issue of this application is respectfully requested.

FEE CALCULATION

No independent or dependent claims are added. No fee is due.

Respectfully submitted,

A handwritten signature in cursive script, reading "Leonard A. Alkov", is written over a horizontal line.

Leonard A. Alkov
Attorney for Applicants
Registration Number 30,021

Raytheon Company
EO/E04/N119
P. O. Box 902
2000 E. El Segundo Blvd.
El Segundo, CA 90245-0902

Telephone: 310-647-2577
Facsimile: 310-647-2616